

REMARKS

Applicant has amended claims 1 and 17 during instant prosecution of this patent application. Applicant is not conceding in this patent application that the original claims, previously cancelled claims, and previously withdrawn claims are not patentable over the art cited by the Examiner, since the claim amendments are only for facilitating expeditious prosecution of this patent application. Applicant respectfully reserves the right to pursue the original claims, and other claims, in one or more continuations and/or divisional patent applications.

The Examiner rejected claims 1, 4-8, 17, and 18-20 under 35 U.S.C. § 112, 2nd ¶ as being incomplete for omitting essential steps, such omission amounting to a gap between the steps.

The Examiner rejected claims 1, 4-8, 17, and 18-20 under 35 U.S.C. § 112, 1st ¶ as failing to comply with the written description requirement.

The Examiner rejected claims 1, 4-8, 17, and 18-20 under 35 U.S.C. § 112, 2nd ¶ as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The Examiner rejected claims 1, 4-8, and 17-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yoshida et al. (Non-Patent Literature) in view of Kindermann et al. (Non-Patent Literature) and further in view of Dardik (U.S. Patent No. 6,702,720).

35 U.S.C. § 112, 2nd ¶

The Examiner rejected claims 1, 4-8, 17, and 18-20 under 35 U.S.C. § 112, 2nd ¶ as being incomplete for omitting essential steps, such omission amounting to a gap between the steps.

Based on the amendments to the claims, Applicant respectfully requests reconsideration of the rejection based on an omission of steps.

The Examiner rejected claims 1, 4-8, 17, and 18-20 under 35 U.S.C. § 112, 2nd ¶ as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Applicant respectfully requests reconsideration and removal of the rejection based on the amendments to the claims. Specifically, the Examiner asserts that the limitation “more rapidly or less rapidly” is a relative term which renders the claim indefinite. However, the claims have been amended to read:

determining, using the control system, for the given activity, a new point of efficiency of the trainable subject with respect to the first parameter, wherein the new point of efficiency is determined by repeatedly increasing stress on the trainable subject by controlling the second parameter and then measuring a current measurement of the first parameter of the trainable subject, the current measurement measured after the initial measurement and before the timer is stopped, until just prior to the trainable subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion *causing the first parameter to vary, wherein a rate of the variance of the first parameter increases or decreases with respect to the second parameter...*

Thus, the allegedly offending limitation has been removed from claim limitations and replaced with a limitation that does not contain a term of degree. Accordingly, Applicant requests reconsideration and removal of the instant rejection.

35 U.S.C. § 112, 1st ¶

The Examiner rejected claims 1, 4-8, 17, and 18-20 under 35 U.S.C. § 112, 1st ¶ as failing to comply with the written description requirement.

Applicant respectfully contends that the specification, as originally filed, provides a teaching of repeating the method and recalculating a point of efficiency. Applicant would like to draw the Examiner's attention to the support provided in the specification. In particular, page 18 of the specification discloses:

The subject 18 is further trained by *repeating steps* 96 through 112 of FIG. 5. Over a period of time, the subject 18 is able to produce a specific level of performance over an improved period of time. As the subject 18 trains and builds up more capacity, the point of efficiency 70A moves to longer and longer lengths of times 74 as illustrated in point of efficiencies 70E, and 70F (FIG. 3). The subject 18 may also be able to run longer in inefficiency and longer overall. (emphasis added)

Therefore, based on the provided support in the specification, Applicant respectfully requests reconsideration and removal of the rejection based on a lack of written description.

35 U.S.C. § 103

The Examiner rejected claims 1, 4-8, and 17-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yoshida et al. (Non-Patent Literature) in view of Kindermann et al. (Non-Patent Literature) and further in view of Dardik (U.S. Patent No. 6,702,720).

Applicant respectfully contends that the combination of cited references fail to teach each and every element of the claim limitations. For example, the combination of the cited references fails to teach providing a performance system, measuring an *initial measurement of a first parameter* of a trainable subject, providing a control system for controlling a second parameter, wherein the second parameter is a parameter of the performance system, setting an *initial point of efficiency of the trainable subject* with respect to the initial measurement of the first parameter, determining a range of tolerance, using the control system, surrounding the initial point of efficiency, starting a timer to measure an elapsed time of a given activity, training the trainable subject within the range of tolerance of the initial point of efficiency, *determining, using the control system, for the given activity, a new point of efficiency of the trainable subject* with respect to the first parameter, wherein the new point of efficiency is determined by repeatedly increasing stress on the trainable subject by controlling the second parameter and then *measuring a current measurement of the first parameter of the trainable subject, the current measurement measured after the initial measurement and before the timer is stopped*, until just prior to the trainable subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the first parameter to vary, wherein a rate of the variance of the first parameter increases or decreases with respect to the second parameter, *wherein the type of stress increased by the control system includes physical activity, environmental hostility, emotional stress, and mathematical calculations, the type of stress*

actually increased during the training of the trainable subject by the control system corresponds to the trainable subject that is responsive to that stress; stopping the timer, using the control system, when the current measurement of the first parameter is outside of the range of tolerance, recording a length of time in which the trainable subject remained in a state of accommodation, wherein the trainable subject remains in a state of accommodation until the current measurement of the first parameter is outside the range of tolerance, and repeating the method, including: determining a new range of tolerance, using the control system, surrounding the new point of efficiency, and training the trainable subject within the new range of tolerance of the new point of efficiency, wherein the new point of efficiency is recalculated and changes each repetition of the method.

The Examiner acknowledges that Yoshida et al. fails to disclose training the trainable subject within the range of tolerance (or tolerance function) of the point of efficiency. However, the claim limitations require training the trainable subject within the range of tolerance for an initial point of efficiency and within a new range of tolerance for a new point of efficiency. The Examiner combines the teachings of Yoshida et al. with Kindermann, asserting that Kindermann teaches training the trainable subject within the range of tolerance. However, Kindermann fails to teach a range of tolerance surrounding both an initial point of efficiency and a new point of efficiency as a current measurement is measured with respect to a first parameter to determine the new point of efficiency.

Furthermore, the Examiner asserts that Yoshida et al. teach repeating the method wherein the point of efficiency is recalculated and changes each repetition of the method. Contrary to the claim limitations, the combination of the cited references fail to teach determining a new range of tolerance, using the control system, surrounding the new point of efficiency, and training the

trainable subject within the new range of tolerance of the new point of efficiency, wherein the new point of efficiency is recalculated and changes each repetition of the method. Specifically, Yoshida et al. state, “[t]raining was performed on a Monark bicycle ergometer for 15 min on 3 days/week for 8 weeks.” (page 225) However, the participants in the training regime taught by Yoshida et al. exercise on the Monark bike for the same amount of time (*i.e.* 15 minutes) every repetition. The claim limitations require that the new point of efficiency will be recalculated upon a repetition of the method. Thus, during the repetition of the method, *the recorded length of time between the starting and the stopping of the timer will change (e.g. increase)* In other words, the length of time the trainable subject remains in a state of accommodation will change (*e.g.* increase). Yoshida et al. teaches that the elapsed time for training on a Monark bicycle remains at 15 minutes, which prevents any recalculation or change of the new point of efficiency because the a change in the new point of efficiency inherently requires a change in the overall elapsed time (*i.e.* from start to finish). For instance, “[a]s the subject 18 trains and builds up more capacity, the point of efficiency 70A moves to longer and longer lengths of times 74 as illustrated in point of efficiencies 70E, and 70F (FIG. 3).” (instant specification, page 18) Because Yoshida et al. does not teach a recalculation or a change to the new point of efficiency due to the fixed length of time, Yoshida et al. fail to teach the step of repeating the method, as required by the claim limitations.

Moreover, the combination of the cited references fail to teach wherein the type of stress increased by the control system includes physical activity, environmental hostility, emotional stress, and mathematical calculations, the type of stress actually increased during the training of the trainable subject by the control system corresponds to the trainable subject that is responsive to that stress. For example, the combination of the cited references is limited to physical activity,

including anaerobic or aerobic activity when it comes to stress applied to the trainable subject. Thus, the combination of the cited references only disclose increasing a physical activity, for example, a 25 watts incremental loading while pedaling a Monark bicycle; the combination is silent with respect to increasing stress in the form of environmental hostility, mathematical calculations, and emotional stress. Accordingly, the combination of the cited references fails to teach each and every element of the claim limitations.

Based on the amendments to the claims and the accompanying arguments, Applicant respectfully requests reconsideration and removal of the obviousness rejection.

CONCLUSION

Based on the preceding arguments, Applicant respectfully believes that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicant invites the Examiner to contact Applicant's representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account 19-0513.

Date: September 9, 2010

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